Sno-Thro®

Owner/Operator Manual

Models
932105 - 8526
932506 - 8526

GB ENGLISH
F FRANÇAIS
E ESPAÑOL

Transfer model & serial number label from product registration here.

Coller l'autocollant du modèle et du numéro de série dans cet encadré.

Transferir aquí la etiqueta del modelo y número de serie del registro del producto.

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Printed in USA

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Trade Name: Appellation commerciale : Handelsbezeichnung: Nome commerciale: Nombre comercial: Handelsnavn: Handelsbeteckning: Kauppanimi: Nazwa handlowa:	Ariens
Model: Modèle : Modell: Modello: Modelo: Modell: Modell: Malli: Model:	932506

Conforms to: Est conforme à : Mit den Anforderungen der folgenden Richtlinien übereinstimmt: È conforme a: Cumple con: Er i samsvar med: Överensstämmer med: Täyttää seuraavat vaatimukset: Jest zgodny z:

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Representative Measured Sound Power Level (L_{wa}) – Niveau de puissance acoustique représentatif mesuré (L_{wa}) – Repräsentativer gemessener Geräuschpegel (L_{wa}) – Livello di potenza sonora rappresentativo rilevato (L_{wa}) – Nivel de potencia acústica representativo medido (L_{wa}) – Representativt målt lydeffektnivå (L_{wa}) – Representativ uppmätt ljudnivå (L_{wa}) – Tyypillinen mitattu äänitehotaso (L_{wa}) – Zmierzony reprezentatywny poziom mocy akustycznej (L_{wa}) –	Guaranteed Sound Power Level (L_{wa}) – Niveau de puissance acoustique garanti (L_{wa}) – Garantierter Geräuschpegel (L_{wa}) – Livello di potenza sonora garantito (L_{wa}) – Nivel de potencia acústica garantizado (L_{wa}) – Garantert lydeffektnivå (L_{wa}) – Garanterad uppmätt ljudnivå (L_{wa}) – Taattu äänitehotaso (L_{wa}) – Gwarantowany reprezentatywny poziom mocy akustycznej (L_{wa}) –
932506: 108 dB_A	932506: 112 dB_A

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05/21/2004
Date Date Datum
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Data

CE Sound and Vibration – Niveau sonore et vibration CE – CE-Geräuschpegel und Vibrationswerte – Livello sonoro e vibrazioni CE – Sonido y vibración CE – CE-lydnivå og Vibrasjonsmåling – CE ljudnivå och Vibrations-mätning – CE-melutaso Tärinä – CE Dźwięku i Wibracji

Model: – Modèle : – Modell: – Modello: – Modelo: – Modell: – Modell: – Malli: – Model:		932506	
Oper. Ear Sound Pressure (L_{pa}) in dB_A – Pression acoustique Pression sonore à aux oreilles de l'opérateur (L_{pa}) en dB_A – Geräuschstärke am Ohr des Bedieners (L_{pa}) in dB_A – Potenza sonora percepita dall'operatore (L_{pa}) in. dB_A – Presión de sonido en el oído (L_{pa}) in dB_A – Lydtrykk i førerens øre (L_{pa}) in. dB_A – vid förarens position (L_{wa}) i dB_A – Kuljettajan korvaan kohdistuva äänipaine (L_{pa})/dB_A – Robocze ciśnienie akustyczne na uchu (L_{pa}) w decybelach$_A$		94	
Vibration Measure (m/sec^2) @ Operator Hands – Niveau de vibrationaux mains de l'opérateur – Vibrationswerte An den Händen des Bedieners – Misura delle vibrazioni alle mani dell'operatore – Cantidad de vibración en las manos del operador – Vibrasjonsmåling ved brukerens hender – Vibrationsmätning vid förarens händer – Tärinä kuljettajan käsissä – Pomiar wibracji (m/sec^2) na rękach operatora **X**		1.8	
Y		5.1	
Z		5.6	

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INTRODUCTION

THE MANUAL

Before operation of unit, carefully and completely read your manuals. If used improperly, this unit could be dangerous and cause personal injury or property damage. The contents will provide you with safety instructions for the safe use of your unit during normal operation and maintenance.

All reference to left, right, front, or rear are given from operator standing in operation position and facing the direction of forward travel.

MODEL AND SERIAL NUMBERS

When ordering replacement parts or making service inquiries, know the Model and Serial numbers of your unit and engine.

Numbers are located on the product registration form in the unit literature package. They are printed on a serial number label, located on the frame of your unit.

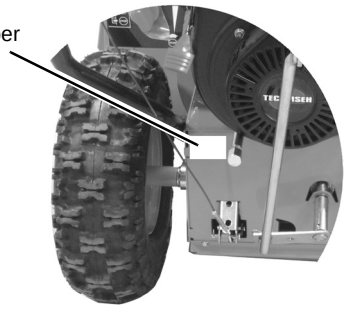

Figure 1 OS0521

- Record Unit Model and Serial numbers here.

- Record Engine Model and Serial number here.

PRODUCT REGISTRATION

The Ariens dealer must register the product at the time of purchase. Registering the product will help the company process warranty claims or contact you with the latest service information. All claims meeting requirements during the limited warranty period will be honored, whether or not the product registration card is returned. Keep a proof of purchase if you do not register your unit.

Customer Note: If the dealer does not register your product, please fill out, sign, and return the product registration card to Ariens or go to www.ariens.com.

UNAUTHORIZED REPLACEMENT PARTS

Use only Ariens replacement parts. The replacement of any part on this vehicle with anything other than an Ariens authorized replacement part may adversely affect the performance, durability, or safety of this unit and may void the warranty. Ariens disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

For a brief list of replacement parts see *Service Parts* in this manual. To obtain a complete parts manual, find your model and serial number. Then go to www.ariens.com or call 1-920-756-4664.

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DISCLAIMER

Ariens reserves the right to discontinue, make changes to, and add improvements upon its products at any time without public notice or obligation. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your unit.

DELIVERY

Customer Note: If you have purchased this product without complete assembly and instruction by your retailer, it is your responsibility to:

1. Read and understand all assembly instructions in this manual. If you do not understand or have difficulty following the instructions, contact your nearest Ariens Dealer for assistance. Make sure all assembly has been properly completed.

NOTE: To locate your nearest Ariens Dealer, call 1-920-756-4664 or go to www.ariens.com on the internet.

WARNING: Improper assembly or adjustments can cause serious injury.

2. Understand all Safety Precautions provided in the manuals.
3. Review control functions and operation of the unit. Do not operate the Sno-Thro unless all controls function as described in this manual.
4. Review recommended lubrication, maintenance and adjustments.
5. Review Limited Warranty Policy.
6. Fill out a Product Registration Card and return the card to the Ariens Company or go to www.ariens.com.

SAFETY

WARNING: To avoid injury to hands and feet, always disengage clutches, shut off engine, and wait for all movement to stop before unclogging or working on snow thrower.

Hand contact with the rotating impeller is the most common cause of injury associated with snow throwers. Never use your hand to clean out the discharge chute.

Keep hands and feet away from auger and impeller.

SAFETY ALERTS

Look for these symbols to point out important safety precautions. They mean:

Attention!

Personal Safety Is Involved!

Become Alert!

Obey The Message!

The safety alert symbols above and signal words below are used on decals and in this manual. Read and understand all safety messages.

DANGER: IMMINENTLY HAZARDOUS SITUATION! If not avoided, WILL RESULT in death or serious injury.

WARNING: POTENTIALLY HAZARDOUS SITUATION! If not avoided, COULD RESULT in death or serious injury.

CAUTION: POTENTIALLY HAZARDOUS SITUATION! If not avoided, MAY RESULT in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTATIONS

NOTE: General reference information for proper operation and maintenance practices.

IMPORTANT: Specific procedures or information required to prevent damage to unit or attachment.

PRACTICES AND LAWS

Practice usual and customary safe working precautions, for the benefit of yourself and others. Understand and follow all safety messages. Be alert to unsafe conditions and the possibility of minor, moderate, or serious injury or death. Learn applicable rules and laws in your area. Always follow the practices set forth in this manual.

REQUIRED OPERATOR TRAINING

Original purchaser of this unit was instructed by the seller on safe and proper operation. If unit is to be used by someone other than original purchaser; loaned, rented or sold, ALWAYS provide this manual and any needed safety training before operation.

SAFETY DECALS AND LOCATIONS

ALWAYS replace missing or damaged Safety Decals. Refer to figure below for Safety Decal locations.

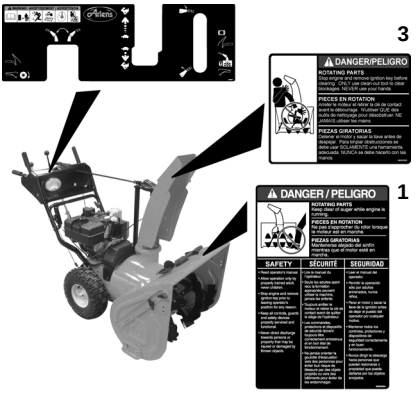


Figure 2

1. DANGER!

ROTATING PARTS.

Keep clear of auger while engine is running.

- Read Operator's Manual.
- Allow operation only by properly trained adult, never children.
- Stop engine and remove ignition key prior to leaving the operator's position for any reason.
- Keep all controls, guards and safety devices properly serviced and functional.
- Never direct discharge towards persons or property that may be injured or damaged by thrown objects.

2. WARNING!

Read Owner/Operator Manual.

Keep people away from unit while operating. Keep children out of work area and under watchful care of a responsible adult.

Never direct discharge towards persons or property that may be injured or damaged by thrown objects.

Stop engine, remove key, read manual before making any repairs, adjustments.

Wear appropriate hearing protection.

ONLY use clean-out tool to clear blockages. NEVER use your hands.

3. DANGER!

ROTATING PARTS! ONLY use clean-out tool to clear blockages. NEVER use your hands. **High speed impeller rotates below discharge opening. Wait for all moving parts to stop before removing clogs or servicing.**

SAFETY RULES

Read, understand, and follow all safety practices in Owner/Operator Manual before beginning assembly or operating. Failure to follow instructions could result in personal injury and/or damage to unit.

ALWAYS remove key and/or wire from spark plug before assembly, maintenance or service. Unintentional engine start up can cause death or serious injury.

Complete a walk around inspection of unit and work area to understand:

• Work area • Your unit • All safety decals

ALWAYS check overhead and side clearances carefully before operation. ALWAYS be aware of traffic when operating along streets or curbs.

Keep children and people away. Keep children out of work area and under watchful care of a responsible adult.

NEVER allow children to operate or play on or near unit. Be alert and shut off unit if children enter area.

DO NOT allow adults to operate unit without proper training.

Keep area of operation clear of all toys, pets, and debris. Thrown objects can cause injury.

Check for weak spots on docks, ramps or floors. Avoid uneven work areas and rough terrain. Stay alert for hidden hazards.

Avoid uneven and rough terrain. DO NOT operate near drop-offs, ditches, or embankments. Unit can suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.

Falling snow, fog, etc. can reduce vision and cause an accident. Operate unit only when there is good visibility and light.

Only trained adults may operate unit.

Training includes actual operation.

NEVER operate unit after or during the use of medication, drugs or alcohol. Safe operation requires your complete and unimpaired attention at all times.

NEVER allow anyone to operate this unit when their alertness or coordination is impaired.

DO NOT operate unit without wearing adequate winter outer garments. Wear adequate safety gear, including safety glasses with side shields, and protective gloves. Wear proper footwear to improve footing on slippery surfaces.

DO NOT wear loose clothing or jewelry and tie back hair that may get caught in rotating parts.

Protect eyes, face and head from objects that may be thrown from unit. Wear appropriate hearing protection.

Avoid sharp edges. Sharp edges can cut. Moving parts can cut off fingers or a hand.

ALWAYS keep hands and feet away from all rotating parts during operation. Rotating parts can cut off body parts.

NEVER place your hands or any part of your body or clothing inside or near any moving part while unit is running.

ALWAYS keep hands away from all pinch points.

DO NOT touch unit parts which might be hot from operation. Allow parts to cool before attempting to maintain, adjust or service.

Never direct discharge towards persons or property that may be injured or damaged by thrown objects. Use extreme caution on gravel surfaces. Stay alert for hidden hazards or traffic. Adjust Runners so Scraper Blade does not contact gravel.

DO NOT throw snow any higher than necessary.

Deflected materials can cause injury and property damage.

Always stand clear of the discharge area when operating this unit.

Fumes from engine exhaust can cause injury or death. DO NOT run engine in an enclosed area. Always provide good ventilation.

ALWAYS disengage attachment, stop unit and engine, remove key and allow moving parts to stop before leaving operator's position.

ROTATING IMPELLER CAN CAUSE SERIOUS INJURY. NEVER ATTEMPT TO UNCLOG OR CLEAN UNIT WHILE ENGINE IS RUNNING.

Read, understand, and follow all instructions in the manual and on the machine before starting.

Understand:

- How to operate all controls.
- The functions of all controls.
- How to STOP in an emergency.

Before starting engine, disengage control(s).

Use only approved extension cords and receptacles when starting units equipped with electric starter. DO NOT connect electric starter cord to any wiring system that is not a three-wire grounded system.

ALWAYS allow unit and engine to adjust to outdoor temperatures before clearing snow.

Always be sure of your footing, especially when operating in reverse or leaving the operator's position. Walk, never run during operation.

DO NOT overload the machine capacity by attempting to clear snow at too fast a rate.

DO NOT operate at too fast a rate.

Slow down and turn corners slowly.

Do not operate in reverse unless absolutely necessary. ALWAYS back up slowly. Always look down and behind before and while backing.

Disengage attachment drive when traveling from one work area to another.

Abnormal Vibrations are a warning of trouble. Striking a foreign object can damage unit. Immediately stop unit and engine. Remove key and wait for all moving parts to stop. Remove wire from spark plug. Inspect unit and make any necessary repairs before restart.

Before cleaning, removing clogs or making any inspections, repairs, etc.: disengage clutch(es), stop unit and engine, remove key, allow moving parts to stop. Allow hot parts to cool.

Run unit a few minutes after clearing snow to prevent freeze-up of attachment.

Disengage attachment when not in use. Disengage all clutches before starting engine. Adjust runners to clear gravel or crushed rock surfaces safely.

Never leave a running unit unattended. ALWAYS shut off engine before leaving unit. ALWAYS remove key to prevent unauthorized use.

Never carry passengers.

Check clutch and brake operation frequently. Adjust and service as required. All motion of drive wheels and auger/impeller must stop quickly when control levers are released.

DO NOT operate on steep slopes. DO NOT clear snow across the face of slopes. Keep all movement on slopes slow and gradual. DO NOT make sudden changes in speed or direction. Use a slow speed to avoid stops or shifts on slopes. Avoid starting or stopping on a slope.

DO NOT park unit on a slope unless absolutely necessary. When parking on a slope always block the wheels.

ALWAYS shut off engine, remove key, and close fuel shut-off valve or drain fuel when transporting unit on a truck or trailer.

Use extra care when loading or unloading unit onto trailer or truck.

Secure unit chassis to transport vehicle. NEVER secure from rods or linkages that could be damaged.

DO NOT transport machine while engine is running.

Keep unit free of ice or other debris. Clean up oil or fuel spills.

This product is equipped with an internal combustion type engine. DO NOT use unit on or near any unimproved, forest-covered or brush covered land unless exhaust system is equipped with a spark arrester meeting applicable local, state or federal laws. A spark arrester, if it is used, must be maintained in effective working order by operator.

Fuel is highly flammable and its vapors are explosive. Handle with care. Use an approved fuel container.

NO smoking, NO sparks, NO flames. ALWAYS allow engine to cool before servicing.

NEVER fill fuel tank when engine is running or hot from operation.

NEVER fill or drain fuel tank indoors.

Replace fuel cap securely and clean up spilled fuel.

Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.

When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.

Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.

If fuel is spilled on clothing, change clothing immediately.

Before tipping unit up onto housing, remove fuel so no spills will occur. Ensure unit is secure and will not tip over during maintenance.

ALWAYS keep protective structures, guards, and panels in good repair, in place and securely fastened. NEVER modify or remove safety devices.

DO NOT change engine governor settings or over-speed engine.

Fumes from engine exhaust can cause injury or death. DO NOT run engine in an enclosed area. Always provide good ventilation.

ALWAYS maintain unit in safe operating condition. Damaged or worn out muffler can cause fire or explosion.

Keep all hardware properly tightened. Check shear bolts frequently.

Maintain or replace safety and instruction labels, as necessary.

NEVER store unit with fuel in fuel tank, inside a building where any ignition sources are present such as hot water heaters, space heaters, or clothes dryers. Allow the engine to cool before storing in any enclosure.

Shut off fuel and allow engine to cool completely before storing in closed area or covering unit.

For extended storage, clean unit thoroughly. See Engine Manual for proper storage.

Use only attachments or accessories designed for your unit.

Check components frequently. If worn or damaged, replace with manufacturer's recommended parts.

ASSEMBLY

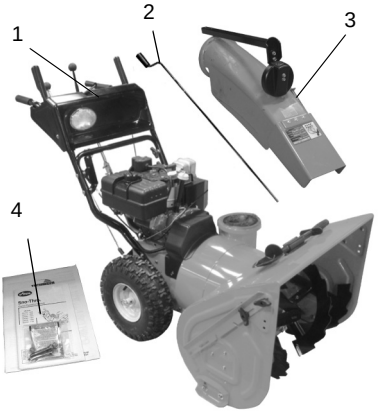
WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

WARNING: Dropping or tipping over boxed unit could result in personal injury or damage to unit.

Tools Required:

- Pliers
- Open-End Wrenches: 3/8, 7/16, 1/2, 9/16" and/or Adjustable Wrench
- Tire Gauge

PACKAGE CONTENTS



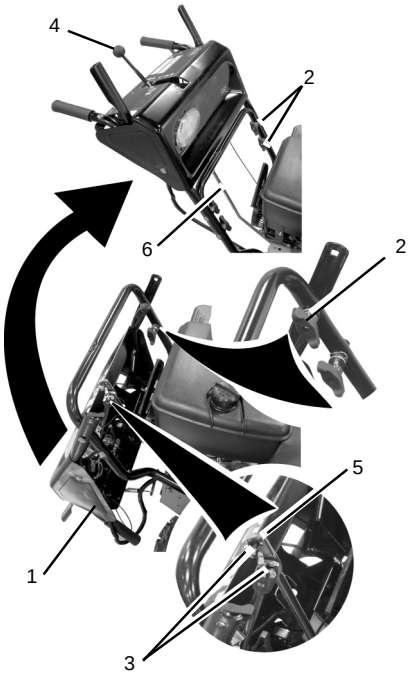
1. Sno-Thro Unit
2. Chute Crank
3. Discharge Chute
4. Literature Pack with Extra Shear Bolts

Figure 3 OS1642

ASSEMBLY

Handlebar and Shift Rod

1. Remove lower wing knobs on handlebar assembly (Figure 4).
2. Remove upper wing nut and bolt on shift rod.
3. Loosen upper wing knobs on handlebar.
4. Loosen lower wing nut and bolt on shift rod.
5. Put speed selector lever into fastest reverse panel notch.
6. Rotate handlebar up so wing knob holes align. Install and tighten all wing knobs.
7. Install wing nut and bolt removed in step 2 on shift rod and tighten hardware.



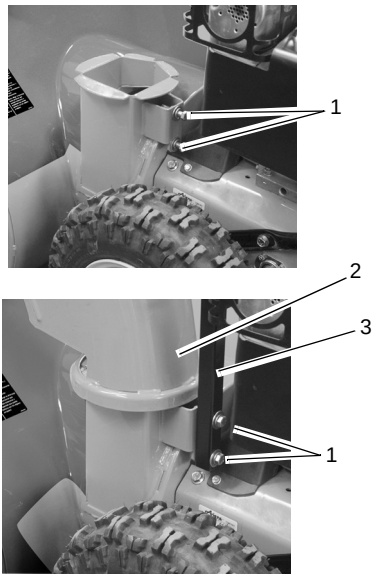
1. Handlebar Assembly
2. Wing Knobs
3. Wing Nut
4. Speed Selector
5. Bolt
6. Shift Rod

Figure 4 OS3020

Install Discharge Chute

Figure 5.

1. Grease discharge chute ring on blower housing (if not already greased).
2. Remove mounting hardware from auger housing.
3. Install discharge chute over opening in the auger housing and secure pedestal to auger housing with hardware removed in step 2.

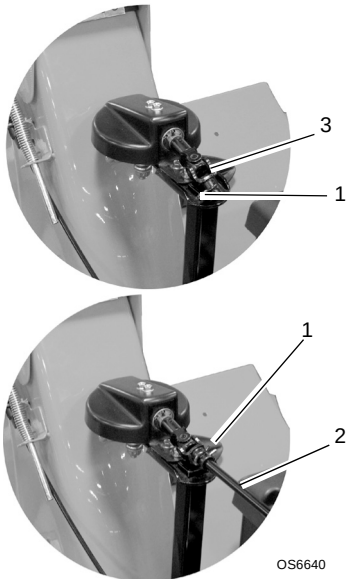


1. Mounting Hardware
2. Discharge Chute
3. Chute Pedestal

Figure 5 OS6610 OS6620

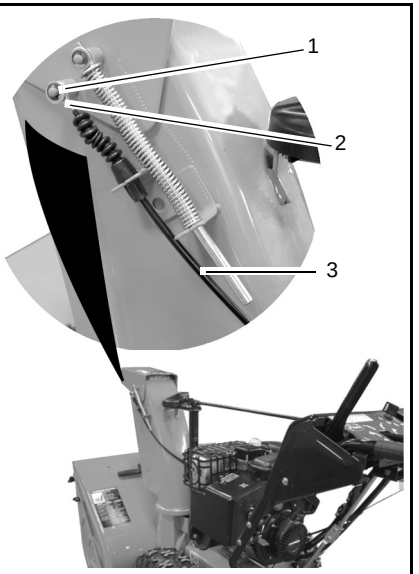
Install Discharge Chute Crank

1. Slide chute crank rod through the opening in control panel, through the upper hole in the bracket under panel and out the hole in the front panel.
2. Align chute crank rod with the universal joint on chute and fasten with spring clip.



1. Spring Clip
2. Chute Crank Rod
3. Universal Joint

Figure 6



1. Cable Eye
2. Flat Washer and E-Ring
3. Deflector Cable

Figure 7

Deflector Remote

1. Remove e-ring and flat washer from stud on discharge chute.
2. Route deflector remote cable between the chute and the chute pedestal.
3. Slide cable end through hole on bracket on left side of chute (Figure 7).
4. Attach cable eye to stud on deflector. Hold in place with flat washer and e-ring.
5. Check deflector travel. Adjust nut on cable end under handlebar to obtain full travel. (See *Deflector Remote* in *Service and Adjustments*.)

Check Function of Dual Handle Interlock

Without the engine running, press down (engage) both clutch levers. Release attachment clutch lever. Attachment clutch should remain engaged until traction clutch lever is released, then both clutches *must* disengage. If they do not, contact your dealer for repairs.

Check Tire Pressure

Check tire pressure and adjust to the pressure listed on tire sidewall.

Check Auger Gearcase Oil

Check oil level in auger gearcase (see *Service and Adjustments*).

Check Engine Crankcase Oil

IMPORTANT: The engine is shipped with 5W-30 oil in crankcase. Refer to Engine Manual for detailed instructions.

Fill Engine Fuel Tank

Refer to Engine Manual for proper fuel type and tank capacity.

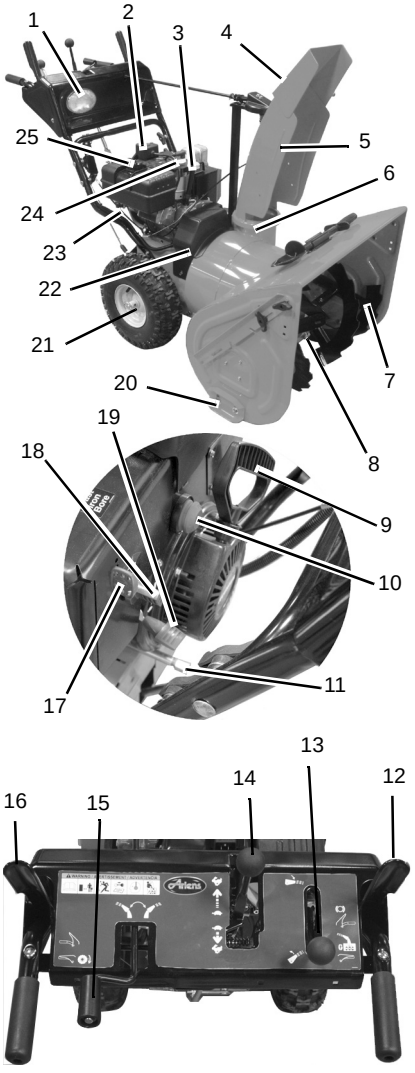
Check Function of all Controls

Ensure unit runs and performs properly. Refer to *Operation*.

Run-in Attachment Belt

1. Start unit in a well-ventilated area according to *Starting and Shut-Off* in *Operation*.
2. Engage attachment clutch lever and run attachment for about 15 minutes.
3. Stop unit, wait for all moving parts to stop, and remove spark plug wire.
4. Adjust belt finger, if necessasry. See *Attachment Drive Belt Replacement on page 22*.
5. Adjust clutch according to *Attachment Clutch/Brake Adjustment* in *Service and Adjustments.*

CONTROLS AND FEATURES



OS6785
OS6740
OS6820

Figure 8

1. Headlight
2. Electric Starter (932105)
3. Oil Fill and Dipstick
4. Discharge Chute Deflector
5. Discharge Chute
6. Impeller
7. Auger
8. Scraper Blade
9. Recoil Starter Handle
10. Primer Bulb
11. Oil Drain Plug
12. Attachment Clutch Lever
13. Deflector Remote Control
14. Speed Selector
15. Chute Crank
16. Traction Drive Clutch Lever
17. Ignition Switch, push-pull
18. Choke
19. Throttle (Engine Stop)
20. Runner(s)
21. Axle Lock Pin
22. Belt Cover
23. Fuel Shut-off Valve
24. Spark Plug and Wire
25. Gas Tank and Cap

OPERATION

WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

WARNING: To avoid injury to hands and feet, always disengage clutches, shut off engine, and wait for all movement to stop before unclogging or working on snow thrower.

Keep hands and feet away from auger and impeller.

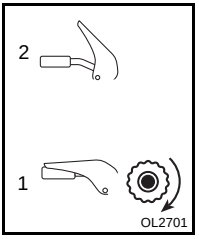
CONTROLS AND FEATURES

See Figure 8 for all Controls and Features locations.

Dual Handle Interlock

When Attachment Clutch and then Traction Drive Clutch are engaged, the Attachment Clutch will remain engaged (lever down) if released. To stop attachment, release Traction Drive Clutch and both clutches will disengage.

Traction Drive Clutch - Left Hand Lever

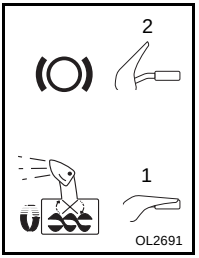


Squeeze the Traction Drive Clutch Lever against the Handlebar (1) to engage wheel drive for propelling unit. Forward speed will vary according to snow depth and moisture content.

Release lever (2) to stop movement.

NOTE: When traveling to or from the area to be cleared, press down on the handlebars enough to raise the front of the unit slightly off the surface. Engage the traction drive clutch without engaging the attachment drive clutch.

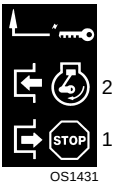
Attachment Clutch - Right Hand Lever



Squeeze Attachment Clutch Lever against handlebar (1) to engage attachment. Release both clutch levers (2) to disengage power and apply brake to attachment.

IMPORTANT: If the belt squeals when the attachment clutch lever is engaged, the attachment drive may be frozen. Immediately release the attachment clutch lever and move the unit into a heated area to thaw.

Ignition Switch



Key Switch has two positions:

1. “Stop” - pulled out
2. Run - pushed in

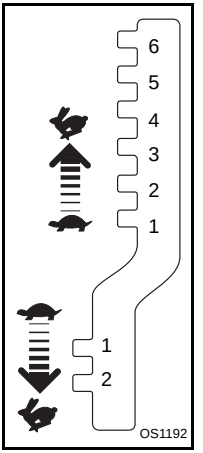
NOTE: DO NOT twist key after it is inserted.

Primer Bulb

Pushing the primer bulb in adds fuel for easier engine start. Refer to *Starting and Shut Off*.

Speed Selector

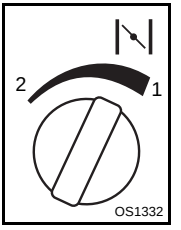
The Speed Selector controls the unit travel in a forward or reverse direction when positioned in notch of speed.



Forward:
(6) Fastest
(1) Slowest
Reverse:
(1) Slow
(2) Fast

IMPORTANT: DO NOT change motion from forward to reverse with clutch engaged. Forward speed can be changed without declutching.

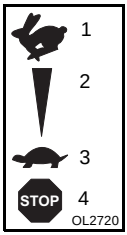
Choke Control Knob



1. Choke Closed position: chokes off air to engine for easier start.
2. Choke Open position: allows for normal operation.

IMPORTANT: Gradually open choke after engine starts.

Throttle



The throttle controls the engine speed. To increase or decrease the engine speed, adjust to:

1. Fast (normal or warm starts)
2. Part-Throttle
3. Slow (cold weather starts)
4. Stop (engine is off)

Electric Starter (932105)

The electric starter will start a properly choked and cranked engine when the starter button is pushed. Refer to *Starting and Shut-Off.*

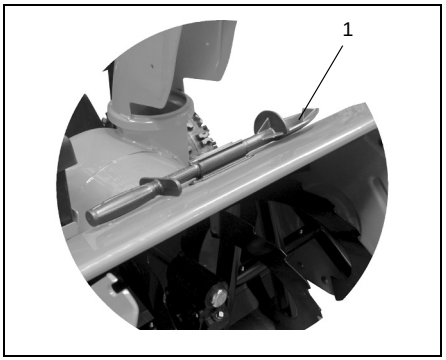
Recoil Starter Handle

When pulled, handle will turn engine over.

IMPORTANT: DO NOT let handle snap back against starter.

Snow Clean-Out Tool

WARNING: Hand contact with the rotating impeller is the most common cause of injury associated with snow throwers. Never use your hand to clean out the discharge chute.



To clear the chute:

1. Shut off the engine.
2. Wait 10 seconds to be sure impeller blades have stopped rotating.
3. Remove the snow clean-out tool (1) from the auger housing and use it to remove the clog.
4. Replace the snow clean-out tool on the auger housing.

Deflector Remote

Place deflector into position before operation. DO NOT throw snow any higher than necessary.

Push deflector remote forward to throw snow lower. Pull deflector remote back to throw snow higher.

Discharge Chute

Discharge chute rotates 215°.

ALWAYS position discharge chute in safe direction and angle, away from operator and bystanders, before starting engine.

Chute Crank

IMPORTANT: If chute does not stay in set position, adjust as directed in *Service and Adjustments,* or repair before operation.

Rotate the Chute with Discharge Chute Crank Handle.

IMPORTANT: DO NOT force frozen chute controls. Start engine and run for 3-5 minutes to thaw. If still frozen, take to warm place until controls are free.

Axle Lock Pin (Figure 9)

Use the axle lock pin to lock or unlock the right wheel. Lock the right wheel to increase traction; unlock the right wheel to allow for easier turning of the unit.

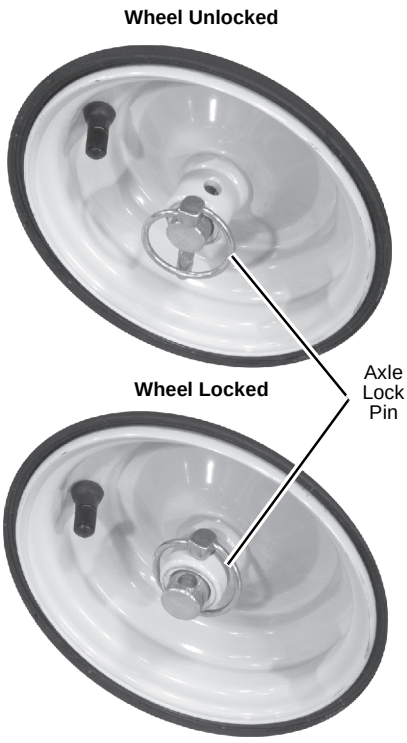


Figure 9

Scraper Blade

The scraper blade allows the back of the housing to keep better contact with the surface being cleared. It also prevents damage to the housing from normal wear.

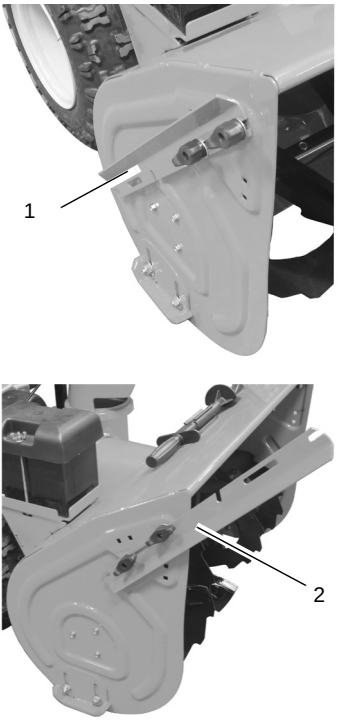
IMPORTANT: DO NOT allow Scraper Blade to wear too far or Auger/Impeller housing will become damaged.

Runners

The runners control the distance between the scraper blade and the ground. Adjust runners equally to keep blade level with the ground. Refer to *Pre-Start* for recommended settings.

Drift Cutters

Drift cutters break up snow drifts that are taller than the auger housing and direct the snow into the auger. Store the drift cutters on the auger housing when not in use. Install them as shown below so they are taller than the snow to be cleared.



1. Stored Position
2. Operating Position

FILLING FUEL TANK

WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

Fuel Shut-Off Valve

IMPORTANT: The fuel shut-off valve MUST be in the closed position prior to transporting the unit.

The fuel shut-off valve has two positions:

- Closed Position: Use this position to service, transport, or store the unit.
- Open Position: Use this position to run the unit.

To add fuel to fuel tank:

1. ALWAYS place unit in open or well-ventilated area.
2. Stop engine and allow to cool.
3. Clean Fuel Cap and surrounding area to prevent dirt from entering Fuel Tank.
4. Remove Cap.

IMPORTANT: DO NOT use gasohol or gasoline containing alcohol. See Engine Manual for correct type and grade of fuel.

5. Fill fuel tank to within 1/2 in. (1.2 cm) below bottom of filler neck with unleaded gasoline.

NOTE: Tank capacity is 1 gallon (3.8 liters).

6. Replace Fuel Cap and tighten.
7. ALWAYS clean up any spilled fuel.

PRE-START

1. Frozen Impeller

IMPORTANT: Before starting engine, check impeller to be sure it is not frozen.

To check impeller:

1. With key in “Stop” position, squeeze Attachment Clutch Lever to Engaged position.
2. Pull Recoil Starter Handle.
3. If Impeller is frozen, (cannot pull Starter Handle) move unit to a heated area and thaw to prevent possible damage.

2. Check Function of Clutches

If clutches do not engage or disengage properly, adjust or repair before operation (see *Service and adjustments*).

3. Check Dual Handle Interlock

Without the engine running, press down (engage) both clutch levers. Release attachment clutch lever. Attachment clutch should remain engaged until traction clutch lever is released, then both clutches *must* disengage.

If clutches do not engage or disengage properly, adjust or repair before operation (see *Service and Adjustments*).

4. Adjust Axle Lock

Use the axle lock pin to lock or unlock the right wheel. Lock the right wheel to increase traction; unlock the right wheel to allow for easier turning of the unit.

5. Adjust Runners

Check and adjust Runners (see *Service and Adjustments*). Allow 1/8 in. (3 mm) between scraper blade and hard, smooth surface(s). Allow 1-1/4 in. (30 mm) between scraper blade and uneven or gravel surfaces.

6. Check Engine Fuel & Crankcase Oil

WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

Check and add fuel if required. Check that the engine crankcase oil is full using dipstick. Refer to Engine Manual for detailed instructions.

TO STOP IN AN EMERGENCY

Immediately release both control levers to stop unit in an emergency. Stop engine, remove key and wait for all rotating parts to stop before leaving operator's position.

STARTING AND SHUT OFF

WARNING: FAILURE TO FOLLOW INSTRUCTIONS could result in personal injury and/or damage to unit. DO NOT attempt to start your unit at this time. Read entire Owner/Operator Manual and the Engine Manual first.

IMPORTANT: Allow unit and engine to adjust to the outdoor temperatures before clearing snow. Before shut-off, run the attachment a few minutes to prevent freeze-up.

NOTE: Try out each control without the engine running to see how it works and what it does.

Manual Start

1. Turn discharge chute straight ahead.
9. Press starter button on engine until engine starts.
2. Make sure that the traction clutch and attachment drive clutch levers are fully disengaged.
3. Push Primer Bulb 2 or 3 times for cold engine.

NOTE: When temperature is below -15° F (-26° C) additional priming may be needed.

4. If engine is cold, apply choke. See Engine Manual for detailed instructions.

NOTE: A warm engine requires less choking than a cold engine.

5. Set throttle to proper starting position.
6. Insert key into ignition switch and push into RUN position. DO NOT twist key after it is inserted.
7. Grasp starter handle and pull rope out slowly until it pulls harder. Let rope rewind slowly.
8. Pull rope with a rapid continuous full arm stroke. Let rope rewind slowly.

IMPORTANT: DO NOT let Starter Handle snap against Starter.

9. Repeat steps 7 and 8 until engine starts. (If engine does not start, refer to *Troubleshooting*.)
10. Adjust choke as needed.
11. Set throttle to Part Throttle or Slow position for adaptation to outside temperature or travel. Set throttle to Fast position for normal operation.

Electric Start (932105)

1. Connect extension cord to prongs on starter.

IMPORTANT: Prevent damage to unit. Know voltage of your starter and only use matching outlets.

2. Plug extension into 120V or 240V 3-wire, grounded outlet.
3. Turn discharge chute straight ahead.
4. Make sure that the traction clutch and attachment drive clutch levers are fully disengaged.
5. Push Primer Bulb 2 or 3 times for cold engine.

NOTE: When temperature is below -15° F (-26° C) additional priming may be needed.

6. Insert key into ignition switch on engine and push into "Run" position. DO NOT twist key after it is inserted.
7. If engine is cold, apply choke. A warm engine requires less choking than a cold engine. See Engine Manual for detailed instructions.
8. Set throttle to proper starting position.

IMPORTANT: DO NOT operate starter more than 15 seconds per minute, as overheating and damage can occur. (If engine does not start, refer to *Troubleshooting*.)

10. Adjust choke as needed.
11. Disconnect power cord from outlet, then starter.
12. Set throttle to Part Throttle or Slow position for travel or adaptation to outside temperature. Once achieved, set throttle to Fast position for normal operation.

Shut Off

1. Release Traction Drive Clutch Lever and allow unit to come to a complete stop.
2. Run Impeller a few minutes after use to prevent freeze-up of Impeller.
3. Release Attachment Clutch Lever and wait for all moving parts to come to a complete stop.
4. Move Throttle to the “Stop” position.
5. Remove key.

SNOW REMOVAL

IMPORTANT: Allow unit and engine to adjust to the outdoor temperatures before clearing snow.

NOTE: Attachment clutch should be engaged before wheel drive clutch when throwing snow.

1. Select Speed Control position and direction.
2. Engage Attachment Clutch - Right Hand Lever.
3. Engage Traction Drive Clutch - Left Hand Lever.

IMPORTANT: DO NOT overload unit capacity by attempting to clear snow at too fast a rate. Use slow speed to clear deep or hard packed snow.

Tips for Operation

Snow is best removed as soon as possible after snow fall.

To clear an area, run unit in an overlapping series of paths. For large areas; start in the middle and throw snow to each side, so snow is not cleared more than once.

ALWAYS direct snow away from area to be cleared and with direction of the wind.

TRAVELING

To travel from one work area to another:

1. Set Throttle to Slow or Part-Throttle position.
2. Press down on handlebars enough to raise front of unit slightly off surface.
3. Engage wheel drive clutch without engaging attachment drive clutch.

TRANSPORT

ALWAYS shut off engine, remove key, and close fuel shut-off valve when transporting unit on a truck or trailer.

Use extra care when loading or unloading unit onto trailer or truck.

Secure unit chassis to transport vehicle. NEVER secure from rods or linkages that could be damaged.

DO NOT transport machine while engine is running.

MAINTENANCE

Ariens Dealers will provide any service or adjustments which may be required to keep your unit operating at peak efficiency. Should engine service be required, contact an Ariens dealer or an authorized engine manufacturer's service center.

> **WARNING:** AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

SERVICE POSITION

> **WARNING:** Before tipping unit up onto housing, remove fuel so no spills will occur. Ensure unit is secure and will not tip over during maintenance.

Place unit on a flat level surface. Tip unit forward onto front of impeller housing for service. Assure unit is secure and will not tip over. Strap and clamp onto bench if needed.

MAINTENANCE SCHEDULE

The chart below shows the recommended maintenance schedule that should be performed on a regular basis. More frequent service may be required.

MAINTENANCE SCHEDULE				
Service Performed	Each Use	Every 5 hrs.	Every 25 hrs.	Yearly
Check Dual Handle Interlock	•			
Check Fasteners	•			
Check Clutches	•			
Clean Engine	•			
Check Engine Oil		•		
Change Engine Oil		*	•	
Check Tire Pressure			•	
Check Auger Gearcase			•	•
General Lubrication			•	•

* After first two hours of operation.

CHECK DUAL HANDLE INTERLOCK

Without the engine running, press down (engage) both clutch levers. Release attachment clutch lever. Attachment clutch should remain engaged until traction clutch lever is released, then both clutches *must* disengage.

CHECK FASTENERS

Make sure all hardware is tightened properly.

CHECK CLUTCHES

Auger / impeller must stop within 3 seconds when attachment clutch/impeller brake lever is released.

Wheels must stop quickly when traction drive clutch lever is released.

If clutches do not engage or disengage properly, adjust or repair before operation (see *Service and Adjustments*).

CLEAN ENGINE

Refer to Engine Manual for detailed instructions.

CHECK ENGINE OIL

The engine crankcase oil should be checked every 5 hours of operation. Oil level MUST be maintained in safe operating range on dipstick at all times or engine damage will result (See Engine Manual).

Park unit on a level surface. Refer to Engine Manual for detailed instructions.

CHANGE ENGINE OIL

Change oil after first 2 hours of operation, thereafter change oil every 25 hours (more often if required). Refer to Engine Manual for detailed instructions.

Run engine just prior to changing oil. Warm oil will flow more freely and carry away more contamination. Remove the oil drain plug from the rear of the unit and tip the unit back to help drain all the oil.

CHECK TIRE PRESSURE

Keep tires at pressure listed on the tire sidewall.

CHECK AUGER GEARCASE

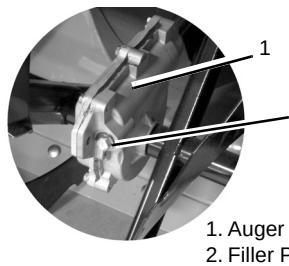
IMPORTANT: Proper oil level must be maintained.

Gear cases are filled to the correct level at the factory. Unless there is evidence of leakage, no additional lubricant should be required. Check oil level each season or every 25 hours of operation.

To ensure adequate lubricant level:

1. Remove filler plug (Figure 10). Lubricant must be at least up to bottom of lubricant filler hole with unit resting on a level-surface.
2. Add lubricant if required. Allow oil to drain to level of plug and replace plug.

IMPORTANT: Use only Ariens special gear lubricant L-2 (Part Number 00008000).



1. Auger Gearcase
2. Filler Plug

Figure 10 OS6775

GENERAL LUBRICATION

IMPORTANT: Wipe each fitting clean before and after lubrication.

IMPORTANT: DO NOT allow grease or oil to get on friction disc, friction plate or belts.

NOTE: Apply Stens Mix Hi-Temp Grease or equivalent to the lubrication fittings. See *Service Parts.*

Sno-Thro should be lubricated (Figure 11) at beginning of season or every 25 operating hours.

Auger Shaft

NOTE: To grease auger shaft, remove shear bolt nuts, and shear bolts. Turn auger on shaft while applying grease at zerk fittings. Replace shear bolt per instructions in *Service and Adjustments*.

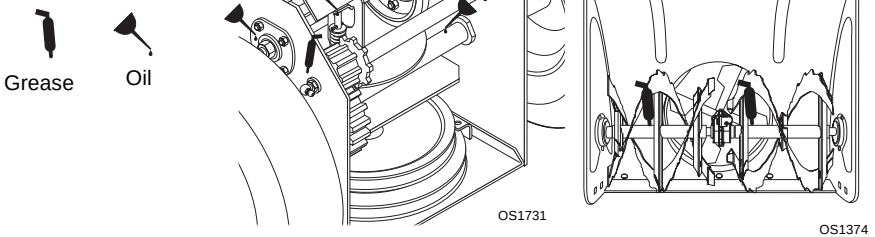


Figure 11

SERVICE AND ADJUSTMENTS

WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

DEFLECTOR REMOTE

Deflector must stay in selected position while throwing snow.

If deflector does not stay in set position:

1. Tighten nut beneath the control panel to increase friction on pressure flange (Figure 12).

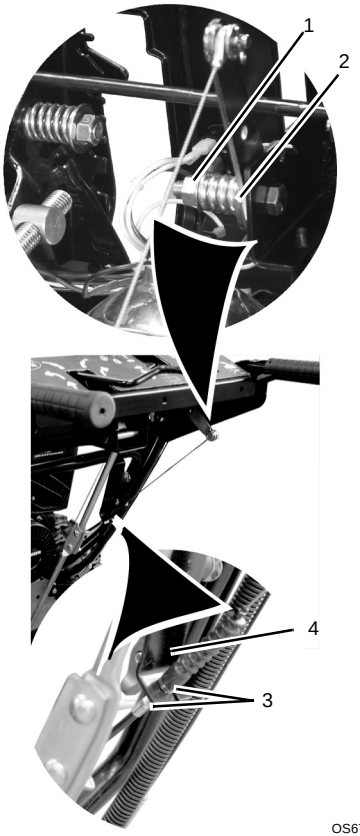
If deflector does not follow full range of travel:

1. Push deflector remote all the way forward.
2. Loosen adjusting nuts on cable support bracket.
3. To adjust the deflector lower:
   Slide cable down. Tighten bottom nut.
4. To adjust deflector higher:
   Slide cable up. Tighten top nut.
5. Check travel and repeat adjustment as necessary.

DISCHARGE CHUTE

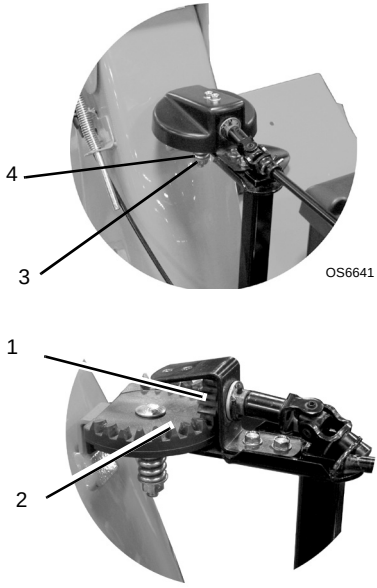
If chute does not stay in position while operating, tighten nut on carriage bolt at pivot point to increase tension on spring (Figure 13).

Smooth and easy rotation of properly lubricated chute with crank is obtained by adjusting pinion and chute gear teeth so they mesh together.



1. Nut
2. Pressure Flange
3. Adjusting Nuts
4. Cable Support Bracket

Figure 12



1. Pinion
2. Chute Gear
3. Carriage Bolt
4. Spring

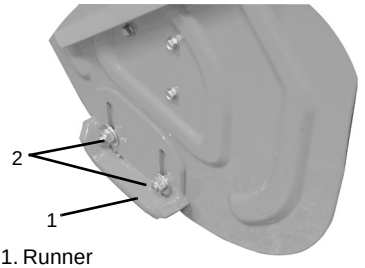
Figure 13

RUNNERS

Runners should be adjusted (Figure 14) as conditions require.

1. Position unit on a hard, flat, smooth level surface.
2. Adjust runners by inserting a spacer of desired thickness under center of scraper blade, loosen runner hardware, slide runners to flat surface. Allow 1/8 in. (3 mm) between scraper blade and hard smooth surfaces. Allow 1-1/4 in. (30 mm) between scraper blade and uneven or gravel surfaces. Retighten hardware.

NOTE: Keep housing level by adjusting runners equally.



1. Runner
2. Runner Hardware

Figure 14

SCRAPER BLADE

IMPORTANT: Damage to auger/impeller housing will result if blade wears down too far.

Scraper blade is adjustable to compensate for wear.

To adjust scraper blade:

1. Tip unit back onto handlebar, support housing and loosen nuts retaining blade.
2. Adjust runners to fully raised position (housing closest to ground).
3. Reposition scraper blade flush with runners and tighten lock nuts.

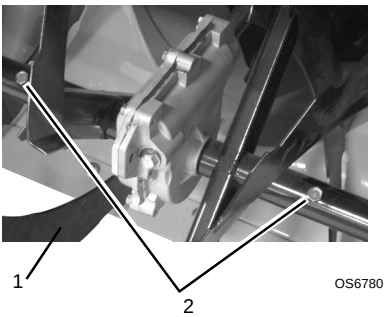
SHEAR BOLTS

IMPORTANT: Use only Ariens shear bolts for replacement. Use of any other type of shear bolt may result in severe damage to unit.

Occasionally a foreign object may enter the auger/impeller housing and jam the auger, breaking shear bolts (Figure 15) which secure the auger to the shaft. This allows auger to turn freely on the shaft preventing damage to gear drive.

For Replacement:

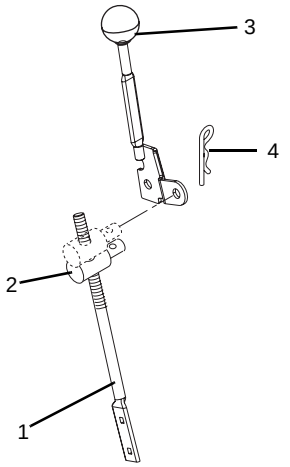
1. Align shear bolt holes in auger with shear bolt holes in the shaft.
2. Drive shear bolt through hole (if shear bolt was broken this will drive remaining part from shaft).
3. Secure shear bolt with nut.



1. Auger
2. Shear Bolts

Figure 15

SPEED SELECTOR ADJUSTMENT



1. Shift Rod
2. Adjustment Pivot Pin
3. Speed Selector Lever
4. Hairpin

Figure 16

To adjust (Figure 16):

1. Remove hair pin from adjustment pivot pin.
2. Pull shift rod and adjustment pivot pin out of speed selector lever.
3. Place the speed selector in the fastest forward speed position.
4. Pull the shift rod straight down towards the ground as far as it will go.

5. Thread the adjustment pivot pin along the shift rod until it aligns with the mating hole on the speed selector lever.
6. Reinsert the pivot pin into the hole on the speed selector lever.
7. Check forward and reverse speeds.
   a. Start unit.
   b. Shift speed selector into first forward speed.
   c. Engage traction clutch. Unit should move forward.
   d. Stop unit.
   e. Shift speed selector into first reverse speed.
   f. Engage traction clutch. Unit should move backward.
   g. Shut off unit.
8. Adjust pivot pin as needed so unit travels forward when speed selector lever is in first forward position and backward when speed selector lever is in first reverse position.
9. Secure adjustment pivot pin to speed selector lever with hairpin.

ATTACHMENT DRIVE BELT REPLACEMENT

Remove Attachment Drive Belt

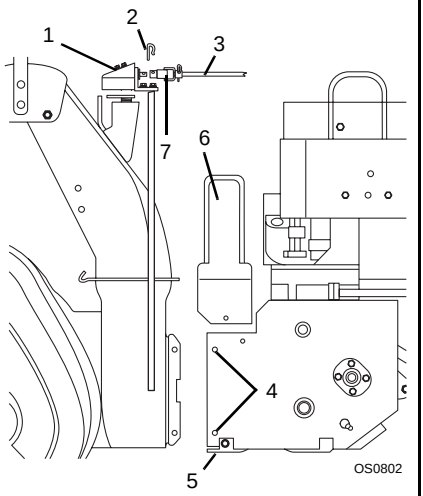
(Figures 17 and 18)

1. Shut off engine, remove key, disconnect spark plug wire and allow unit to cool completely.
2. Remove two screws securing belt cover to unit and remove belt cover.
3. Remove spring pin from chute crank rod assembly at universal joint and separate.
4. Remove belt finger by removing cap screw mounting belt finger to engine.
5. Remove attachment drive belt from engine sheave (it may be necessary to turn engine sheave using recoil starter handle).

CAUTION: Always support Sno-Thro frame and housing when loosening the cap screws holding them together. Never loosen cap screws while unit is in service position.

IMPORTANT: To avoid bending bottom cover, when tipping unit apart, support handlebars firmly or tip unit up on housing and remove bottom cover by removing four cap screws before separating unit.

6. Support Sno-Thro frame and housing.
7. Remove top two cap screws and loosen lower cap screws holding blower housing to frame (one on each side).
8. Hold the brake away from the attachment pulley and separate housing from unit. Lower handlebar on floor.
9. Remove attachment drive belt from lower pulley (hold brake away from belt).



1. Pinion and Gear
2. Spring Clip Pin
3. Chute Crank
4. Housing Bolt Holes
5. Bottom Cover
6. Belt Cover
7. Universal Joint

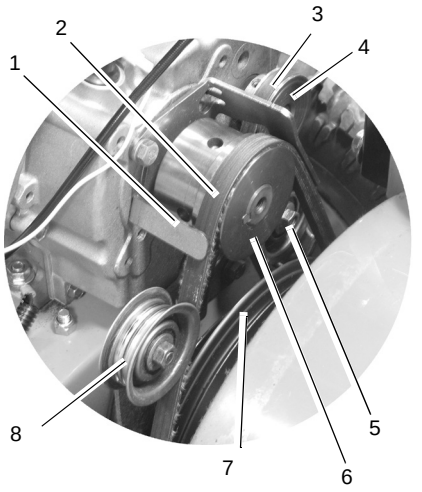
Figure 17

Replace Attachment Drive Belt

1. Place new belt onto lower pulley and while holding brake out of way, tip unit together.
2. Secure blower housing to frame with cap screws.
3. Place belt onto engine sheave.
4. Make sure engine sheave and attachment pulley align, and belt rides on idler.
5. Replace belt finger.

IMPORTANT: BELT FINGER MUST BE between 1/16 to 1/8 in. (1.6–3 mm) from belt with attachment clutch engaged or belt grabbing may occur causing impeller to rotate while attachment clutch is disengaged (Figure 18).

6. Adjust clutch per *Attachment Clutch/Impeller Brake Adjustment* below.
7. Replace chute crank and secure with spring pin.
8. Replace belt cover and secure with screws.



1. Belt Finger
2. Attachment Drive Belt
3. Traction Drive Belt
4. Camshaft Pulley
5. Traction Belt Idler
6. Engine Sheave
7. Attachment Pulley
8. Attachment Belt Idler

Figure 18 OS6810

TRACTION DRIVE BELT REPLACEMENT

NOTE: Housing and frame must be tipped apart and attachment drive belt removed from engine sheave in order to change traction drive belt (Figures 17 & 18).

CAUTION: Always support Sno-Thro frame and blower housing when loosening the cap screws holding them together. Never loosen cap screws while unit is in service position.

1. Remove attachment drive belt (See *Remove Attachment Drive Belt*).
2. Pull idler away from traction drive belt and remove belt from idler, camshaft pulley and driven pulley (it may be necessary to turn camshaft pulley using recoil starter handle).

NOTE: To gain clearance, engage traction clutch and if necessary pull back attachment brake/idler arm.

3. Replace traction drive belt.
4. Replace attachment drive belt (See *Replace Attachment Drive Belt*).

ATTACHMENT CLUTCH/BRAKE ADJUSTMENT

WARNING: IMPROPER ADJUSTMENT could result in unexpected movement of auger and impeller causing death or serious injury. Auger / impeller must stop within 3 seconds when Attachment Clutch/Impeller Brake lever is released.

WARNING: Adjustment procedure requires the engine to be run with the belt cover off. Read, understand and follow all *Operational, Fuel* and *Maintenance and Service Safety Rules* before adjusting your unit.

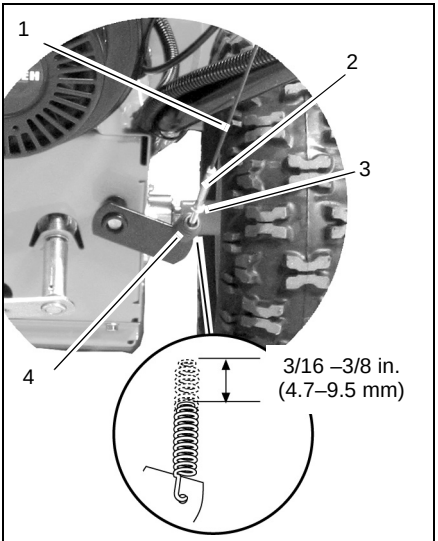
1. Remove belt cover.
2. Adjust cable slack (Figure 19).

IMPORTANT: The clutch cable must be slack when lever is disengaged.

a. With clutch lever disengaged, loosen jam nut on cable adjuster.
b. Turn adjuster body to remove all slack from the cable. Do not stretch spring or move lower clutch arm.
c. Finger tighten the jam nut and then turn back the adjuster body 2 turns.
d. Hold adjuster body with pliers and tighten jam nut with wrench.

3. Check spring length.
   a. Measure the length of the clutch cable spring.
   b. Engage and hold the attachment clutch lever.
   c. Measure the length of the spring again. The spring should be 3/16 –3/8 in. (4.7–9.5 mm) longer when the lever is engaged.

d. If spring does not stretch at least 3/16 in. (4.7 mm), or the belt tension is insufficient to throw snow properly, remove the attachment belt idler (see Figure 18) and replace it in the hole on the idler arm closer to the belt. Adjust cable slack until spring stretch is 3/16 –3/8 in. (4.7–9.5 mm). (Increased spring stretch will increase belt tension).



1. Attachment Control Cable
2. Cable Adjuster
3. Jam Nut
4. Spring

Figure 19 OS6816

4. Check Brake.

   When the clutch lever is disengaged, the brake must contact the attachment belt.

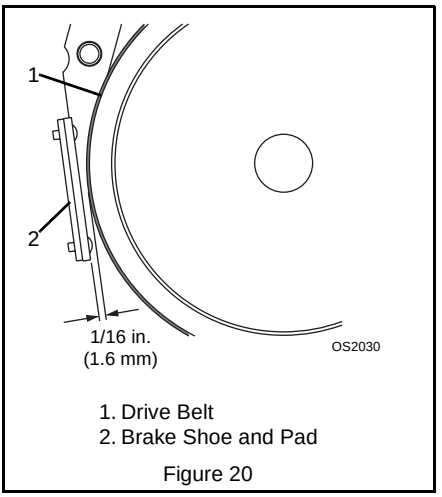
   When the clutch lever is engaged, the brake must be more than 1/16 in. (1.6 mm) away from the belt (Figure 20).

IMPORTANT: If attachment clutch/brake cannot be adjusted within tolerances, see your Dealer for repairs.

5. Check belt finger clearance.

   With clutch lever engaged, belt fingers should be 1/16–1/8 in. (1.6-3 mm) from belt. Adjust belt fingers as necessary.

6. Replace belt cover.
7. Check that auger/impeller stops within 3 seconds after attachment clutch/impeller brake bail is released.



1. Drive Belt
2. Brake Shoe and Pad

Figure 20

TRACTION DRIVE CLUTCH ADJUSTMENT

If drive slips, adjust traction clutch to compensate for friction disc wear.

To test traction clutch (Figure 21):

1. Put unit in first forward speed.
2. Without engine running, push unit forward while slowly moving the traction drive clutch lever toward the handle grip.
3. Measure distance between lever and handlebar when the wheels brake. If distance is not 6–1/8 in. ± 1/4 in. (15.5 cm ± 6 mm), adjust the traction clutch.

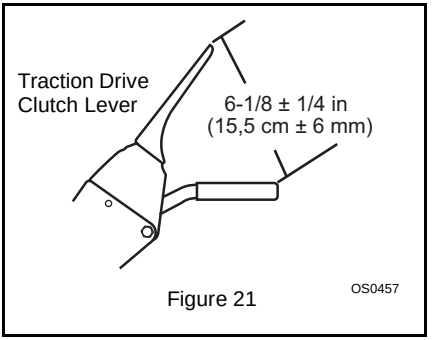


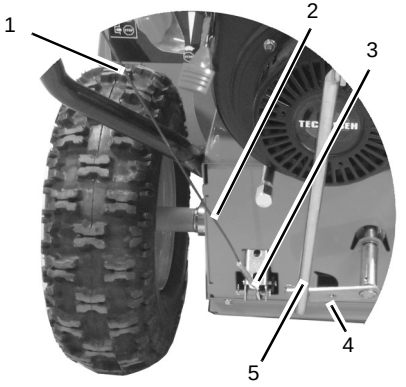
Figure 21

To adjust traction clutch (Figure 22):

1. Loosen jam nut on traction cable adjustment barrel.

2. Turn the adjustment barrel up the cable to decrease the distance between clutch lever and handlebar.

   Turn the adjustment barrel down the cable to increase the distance between clutch lever and handlebar.
3. Check traction clutch lever distance and repeat adjustment steps if necessary.
4. Tighten jam nut on traction cable adjustment barrel.



1. Traction Clutch Cable
2. Adjustment Barrel
3. Jam Nut
4. Speed Selector Arm
5. Shift Rod

OS6825

Figure 22

FRICTION DISC REPLACEMENT

Remove (Figure 22 and 23)

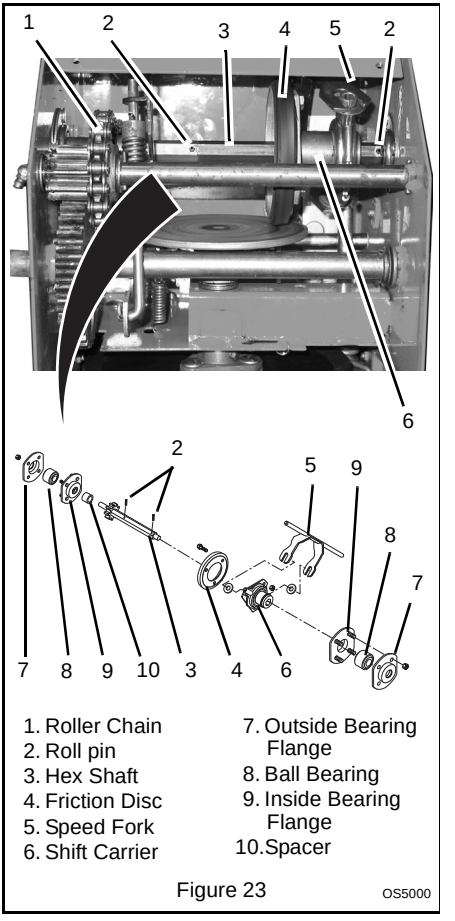
1. Shut off engine, remove key, disconnect spark plug wire, and allow unit to cool completely.

> **CAUTION:** Remove fuel from fuel tank prior to placing unit in service position.

2. Place unit on a level surface and tip unit up onto front housing.
3. Remove wheels.
4. Remove bottom cover.
5. Disconnect shift rod from speed selector arm.
6. Carefully tap roll pins out of hex shaft.
7. Remove outside bearing flange and bearing from each side of unit.
8. Remove friction disc from shift carrier.
9. Remove roller chain from sprocket on hex shaft.
10. Remove spacer from hex shaft.
11. Hold shift carrier and slide hex shaft slowly to the right.
12. Slide shaft only far enough to remove the old friction disc from hex shaft.

Install (Figure 22 and 23)

1. Place flat side of new friction disc against shift carrier.
2. Hold shift carrier, slide hex shaft back toward the left through roller chain and spacer, and through the opening in the side of the unit.



1. Roller Chain
2. Roll pin
3. Hex Shaft
4. Friction Disc
5. Speed Fork
6. Shift Carrier
7. Outside Bearing Flange
8. Ball Bearing
9. Inside Bearing Flange
10. Spacer

OS5000

Figure 23

3. Install roller chain on sprocket teeth of hex shaft.
4. Install bearings and outside bearing flanges.

5. Bolt new friction disc to shift carrier. Tighten hardware to 5-6 lbf-ft (6.8 to 8.13 N•m).
6. Install roll pins in hex shaft. Ensure roll pins are centered in hex shaft.
7. Install shift rod on speed selector arm.
8. Install bottom cover.
9. Install wheels.
10. Set unit upright.
11. Install spark plug wire on spark plug.
12. Adjust speed selector lever (see *Speed Selector Adjustment* on page 21).

STORAGE

WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

SHORT TERM

IMPORTANT: NEVER spray unit with high pressure water or store unit outdoors.

Run with attachment clutch engaged a few minutes after each use to free unit of any loose or melting snow.

Close fuel shut-off valve.

Inspect unit for visible signs of wear, breakage or damage.

Keep all nuts, bolts and screws properly tightened and know unit is in safe working condition.

Store unit in a cool, dry protected area.

LONG TERM

Clean unit thoroughly with mild soap and low pressure water and lubricate (see Maintenance). Touch up all scratched painted surfaces.

Remove weight from wheels by putting blocks under frame or axle.

When storing unit for extended periods of time, remove all fuel from tank and carburetor (run dry). Refer to Engine Manual.

SERVICE PARTS

Order the following parts through your Dealer:

Part No.	Description
00036800	Stens Mix Hi-Temp Grease (3, 3 oz. cartridges)
21533400	Spark Plug
07200007	Impeller Belt
07228600	Traction Belt
51001500	Shear Bolt Kit
03248300	Friction Disc

To obtain a complete parts manual, find your model and serial number. Then go to www.ariens.com or call 1-920-756-4664.

ACCESSORIES

See your authorized Ariens dealer to add the additional accessories available to your Sno-Thro.

Part No.	Description
72403600	120 Volt Starter Kit
72402200	240 Volt Starter Kit*
72406500	Front Weight Kit

* Available in CE countries.

TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	CORRECTION
Engine will not crank/start.	1. Fuel tank is empty. 2. Fuel shut-off valve closed. 3. Build up of dirt and residue around governor/carburetor. 4. Key Switch not in run position. 5. Ignition switch starter circuit not functioning.	1. Fill fuel tank. 2. Open fuel shut-off valve. 3. Clean area around governor/carburetor. 4. Put Key Switch into run position. 5. Check for a bad starter or connections.
Engine stops.	1. Out of fuel. 2. Fuel shut-off valve closed. 3. Mechanical jam in blower rake or impeller. 4. Polluted fuel supply. 5. Faulty spark plug.	1. Fill fuel tank. 2. Open fuel shut-off valve. 3. Turn off engine, remove key, and wait for all moving parts to stop. Check for and remove obstruction and repair before restart. 4. Replace with clean fuel. 5. Replace or clean spark plug.
Engine problems.	1. See Engine Manual.	
Does not operate in Forward / Reverse.	1. Friction disc not adjusted properly. 2. Traction belt not functioning. 3. Speed selector not adjusted properly.	1. Repair or replace friction disc. See *Service and Adjustments.* 2. Repair or replace traction drive belt. See *Service and Adjustments.* 3. Adjust speed selector. See *Service and Adjustments*.
Small rubber beads collect in frame	1. Friction disc wear.	1. Normal friction disc wear. Chunks or large pieces of rubber mean friction disc should be checked and replaced as necessary.
Unit throws snow poorly or does not throw snow.	1. Shear bolts broken. 2. Attachment clutch/brake not adjusted properly. 3. Attachment drive belt worn or damaged.	1. Replace shear bolts *(see Shear Bolts* on page 21). 2. Adjust attachment clutch/brake *(see Attachment Clutch/Brake Adjustment* on page 23). 3. Replace attachment drive belt *(see Attachment Clutch/Brake Adjustment* on page 23).

SPECIFICATIONS		
Model Number	932506	932105
Description	8526	8526
Engine - Tecumseh	LH318SA	LH318SA
Power Max - HP (Kw/min^{-1})	8.5 (6.3)	
Fast Idle Speed-RPM (min^{-1})	3600 ± 150	
Displacement - in. (cc)	19.43 (318.3)	
Electric Start	Optional 240V	120V
Fuel	See Engine Manual	
Tank Capacity - qt. (L)	4 (3.8)	
Snow Clearing Width - in. (cm)	26 (66.0)	
Chute		
Rotation Angle	215°	
Rotation Control at Handlebar	Yes	
Dual Handle Interlock	Yes	
Impeller		
Diameter - in. (cm)	14 (35.6)	
Speed-RPM-Max (min^{-1})	1150	
Auger		
Diameter - in. (cm)	16 (40.6)	
Speed-RPM-Max (min^{-1})	118	
Auger Brake	Yes	
Drive	Disc-O-Matic (R^3)	
Speeds	6 Forward and 2 Reverse	
Pneumatic Tires - in. (cm)	15 (38.1)	
Size and Weight		
Height - in. (cm)	45.5 (115.6)	
Length - in. (cm)	60.8 (154.4)	
Width - in. (cm)	28.6 (72.6)	
Weight - lbs (Kg)	265.5 (116.4)	261.5 (118.6)
Headlight	Yes	

Ariens Company
655 West Ryan Street
P.O. Box 157
Brillion, WI 54110-0157
920-756-2141
Fax 920-756-2407
www.ariens.com

3-Year Limited Sno-Thro Warranty

Ariens Company warrants to the original purchaser that consumer products manufactured by Ariens Company will be free from defects in material and workmanship for a period of three (3) years after the date of purchase, and will repair any defect in material or workmanship, and repair or replace any defective part, subject to the conditions, limitations and exclusions set forth herein.

The three-year duration of this warranty applies only if the product is put to ordinary, reasonable, and usual personal, family, or household uses. If the product is put to any business, commercial, or industrial use, then the duration of this warranty is ninety (90) days after the date of purchase, or one (1) year after the date of purchase if the product is labeled as a Professional/Commercial Product. If any product is rented or leased, then the duration of this warranty is ninety (90) days after the date of purchase.

Genuine Ariens service parts and accessories not purchased with the product covered by this warranty, but which are later purchased and used with that product, are warranted to be free from defects in material and workmanship for a period of ninety (90) days after date of purchase, and Ariens Company will repair or replace any such part or accessory free of charge, except for labor, during that period.

This warranty is subject to the following conditions, limitations, and exclusions:

This warranty is valid only if the following conditions are met:

- The purchaser must perform maintenance and minor adjustments explained in the owner's manual.
- The purchaser must promptly notify Ariens Company or an authorized Ariens service representative of the need for warranty service.
- Returning the product registration card to Ariens Company will enable the company to contact the registrant with repair or replacement part information.

The following items are not covered by this warranty:

- Engines and engine accessories are covered only by the warranty made by the engine manufacturer, and are not covered by this warranty.
- Parts that are not genuine Ariens service parts are not covered by this warranty.
- Shoes, runners, scraper blades, shear bolts, headlights, light bulbs are not covered by this warranty.
- Any defect which is the result of misuse, alteration, improper assembly, improper adjustment, neglect, or accident is not covered by this warranty.
- Products which were not purchased in the United States, Puerto Rico, or Canada are not covered by this warranty. In all other countries, contact place of purchase.

This warranty is subject to the following limitations:

- The purchaser must transport the product to and from the place of warranty service.
- Warranty service must be performed by an authorized Ariens service representative. (To find an authorized Ariens service representative, contact Ariens Company at the website, number or address above.)
- Batteries are warranted only for a period of twelve (12) months after date of purchase, on a prorated basis. For the first ninety (90) days of the warranty period, a defective battery will be replaced free of charge. If the applicable warranty period is more than 90 days, Ariens Company will cover the prorated cost of any defective battery, for up to twelve (12) months after the date of purchase.
- Normal maintenance items including, but not limited to, belts, idlers, cables, friction wheels, tires, wheels, electrical components are warranted for a two-year period from the date of purchase unless a shorter period would apply based on how the product is used, then the shorter period will apply.

DISCLAIMER OF FURTHER WARRANTY

Ariens Company makes no warranty, express or implied, other than what is expressly made in this warranty. If the law of your state provides that an implied warranty of merchantability, or an implied warranty of fitness for particular purpose, or any other implied warranty, applies to Ariens Company, then any such implied warranty is limited to the duration of this warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

LIMITATION OF REMEDY AND DAMAGES

Ariens Company's liability under this warranty, and under any implied warranty that may exist, is limited to repair of any defect in workmanship, and repair or replacement of any defective part. Ariens Company shall not be liable for incidental, special, or consequential damages (including lost profits). Some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Form: ALW3-122002

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⚠ WARNING ⚠

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.